

CLAIMS

1. (Original) A method for call-limiting one or more candidate calls received by a router comprising:

determining, by the router, whether ringing the one or more candidate calls will exceed a predetermined power limit;
ringing said one or more candidate calls if ringing said candidate calls will not exceed said power limit; and
not ringing said one or more candidate calls if said candidate calls will exceed said power limit.

2. (Original) The method of claim 1, further comprising the act of placing said one or more candidate calls which exceed said power limit into a queue.

3. (Original) The method of claim 2, further comprising the act of selecting said one or more candidate calls for ringing when ringing said candidate calls will not exceed said power limit.

4. (Original) The method of claim 3, wherein said act of selecting said one or more candidate calls for ringing includes selecting the first candidate call for which a RING CAS signal arrives.

5. (Original) The method of claim 1, further including the act of generating a ringback tone.

6. (Original) The method of claim 1, wherein said act of ringing said one or more candidate call if ringing said candidate calls will not exceed said power limit further includes the act of providing a ringing state for each said candidate call.
7. (Original) The method of claim 6, wherein said act of ringing said one or more candidate calls if ringing said candidate calls will not exceed said power limit further includes the act of setting said ringing state for said candidate call to RINGING.
8. (Original) The method of claim 1, wherein said act of not ringing said one or more candidate calls if said candidate calls will exceed said power limit further includes the act of starting a corresponding timer.
9. (Original) The method of claim 6, further including the acts of:
determining, by said router, whether a line has gone OFF HOOK;
if a line has gone OFF HOOK, then determining, by said router, whether
said line was previously ringing;
if said line was already ringing, then updating, by said router said power
limit and changing said ringing state to NOT RINGING; and
disregarding, by said router, calls which are not OFF HOOK or not
previously ringing.
10. (Original) The method of claim 1, wherein said power limit comprises the REN limit for said router.

11. (Original) A call-limiting router configured to provide communications between a network and one or more POTS phones coupled to corresponding FXS ports, said router comprising:

a processor operatively disposed within said router determining whether ringing one or more candidate calls will exceed a predetermined power limit;

ringing said one or more candidate calls if ringing said candidate calls will not exceed said power limit; and

not ringing said one or more candidate calls if said candidate calls will exceed said power limit.

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12. (Original) The router of claim 11, wherein said processor is further configured to place said one or more candidate calls which exceed said power limit into a queue.

13. (Original) The router of claim 12, wherein said processor is further configured to select said one or more candidate calls for ringing when ringing said candidate calls will not exceed said power limit.

14. (Original) The router of claim 13, wherein said processor is further configured to select the first ringing candidate call in the queue.

15. (Original) The router of claim 11, wherein said processor is further configured to provide a ringing state for each said candidate call if said candidate call will not exceed said power limit.

16. (Original) The router of claim 15, wherein said processor is further configured to set said ringing state for said candidate call to RINGING.

17. (Original) The router of claim 11 wherein said processor is further configured to start a corresponding timer.

18. (Original) The router of claim 15, wherein said processor is further configured to:
determine whether a line has gone OFF HOOK and whether said line
was previously ringing;
change said ringing state to NOT RINGING if said line was previously
ringing; and
disregard calls which are not OFF HOOK or not previously ringing.

19. (Original) The router of claim 11, wherein said power limit comprises the REN limit
for said router.

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20. (Original) A call-limiting router comprising:
means for determining whether ringing the one or more candidate calls
will exceed a predetermined power limit;
means for ringing said one or more candidate calls if ringing said
candidate calls will not exceed said power limit; and
means for not ringing said one or more candidate calls if said candidate
calls will exceed said power limit.

21. (Original) The router of claim 20, further comprising means for placing said one or
more candidate calls which exceed said power limit into a queue.

22. (Original) The router of claim 21, further comprising means for selecting said one or more candidate calls for ringing when ringing said candidate calls will not exceed said power limit.

23. (Original) The router of claim 22, further including means for selecting the first candidate call for which a RING CAS signal arrives.

24. (Original) The router of claim 20, further including means for generating a ringback tone.

A 25. (Original) The router of claim 20, further including means for providing a ringing state for each said candidate call.

26. (Original) The router of claim 25, wherein said means for ringing said one or more candidate calls if ringing said candidate calls will not exceed said power limit further includes means for setting said ringing state for said candidate call to RINGING.

27. (Original) The router of claim 20, wherein said means for not ringing said one or more candidate calls if said candidate calls will exceed said power limit further includes means for starting a corresponding timer.

28. (Original) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for call-limiting one or more candidate calls received by a router, said method comprising:

determining, by the router, whether ringing the one or more candidate calls will exceed a predetermined power limit;

ringing said one or more candidate calls if ringing said candidate calls will not exceed said power limit; and not ringing said one or more candidate calls if said candidate calls will exceed said power limit.

29. (Original) The device of claim 28, said method further comprising the act of placing said one or more candidate calls which exceed said power limit into a queue.

30. (Original) The device of claim 29, said method further comprising the act of selecting said one or more candidate calls for ringing when ringing said candidate calls will not exceed said power limit.

A/ 31. (Original) The device of claim 30, said method wherein said act of selecting said one or more candidate calls for ringing includes selecting the first candidate call for which a RING CAS signal arrives.

32. (Original) The device of claim 28, said method further including the act of generating a ringback tone.

33. (Original) The device of claim 28, wherein said act of ringing said one or more candidate call if ringing said candidate calls will not exceed said power limit further includes the act of providing a ringing state for each said candidate call.

34. (Original) The device of claim 33, wherein said act of ringing said one or more candidate calls if ringing said candidate calls will not exceed said power limit further includes the act of setting said ringing state for said candidate call to RINGING.

35. (Original) The device of claim 28, wherein said act of not ringing said one or more candidate calls if said candidate calls will exceed said power limit further includes the act of starting a corresponding timer.

36. (Original) The device of claim 33, said method further including the acts of:
determining, by said router, whether a line has gone OFF HOOK;
if a line has one OFF HOOK, then determining, by said router, whether
said line was previously ringing;
if said line was already ringing, then updating, by said router said power
limit and changing said ringing state to NOT RINGING; and
disregarding, by said router, calls which are not OFF HOOK or not
previously ringing.

37. (Original) The device of claim 28, wherein said power limit comprises the REN
limit for said router.